

# **FALLBROOK COMMUNITY AIRPARK AIRPORT LAYOUT PLAN SET UPDATE RUNWAY SAFETY AREA PROJECT**

**November 1, 2010**

**Robert P. Wadell, P.E., MSCE, F.ASCE**

**WADELL ENGINEERING CORPORATION**

**Airport Planning - Engineering - Management Consultants**



# DISCUSSION

- **AIRPORT LAYOUT PLAN SET UPDATE**
- **PHASE ONE - RUNWAY SAFETY AREA PROJECTS DESIGN**



# FALLBROOK COMMUNITY AIRPARK

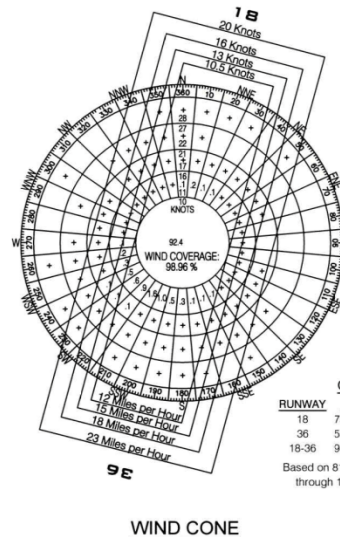
## DEPARTMENT OF PUBLIC WORKS

### AIRPORT LAYOUT PLAN DRAWINGS

OCTOBER 2010

#### LIST OF DRAWINGS

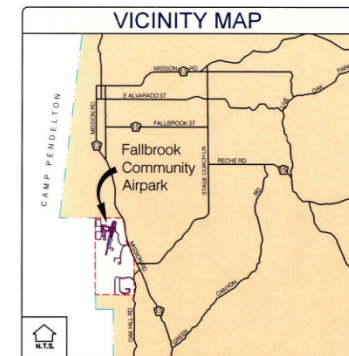
NO.	TITLE
0.	TITLE SHEET
1.	NEW AIRPORT LAYOUT PLAN
2.	AIRPORT AIRSPACE DRAWING
3.	TERMINAL AREA LAYOUT PLAN
4.	CAPITAL PROJECTS PLAN



CROSSWIND COVERAGE

RUNWAY	10.5	13	16	20
18	75.95%	76.49%	76.77%	76.83%
36	55.58%	55.64%	55.68%	55.70%
18-36	98.96%	99.56%	99.89%	99.97%

Based on 81,456 observations between 1990 through 1999 taken at Camp Pendleton.



FALLBROOK NEW-TS 10-06-10

COUNTY OF SAN DIEGO  
DEPARTMENT OF PUBLIC WORKS  
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



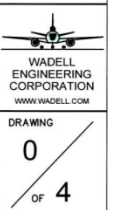
RECOMMENDED BY:	DATE	REVISIONS	BY	APPROVED	DATE
APPROVED BY:	DATE				
MUHAMMAD TAKHARRI, COUNTY ENGINEER					

COORDINATE INDEX	
N	E
CONST. COMPL.	
FIELD REVISIONS	

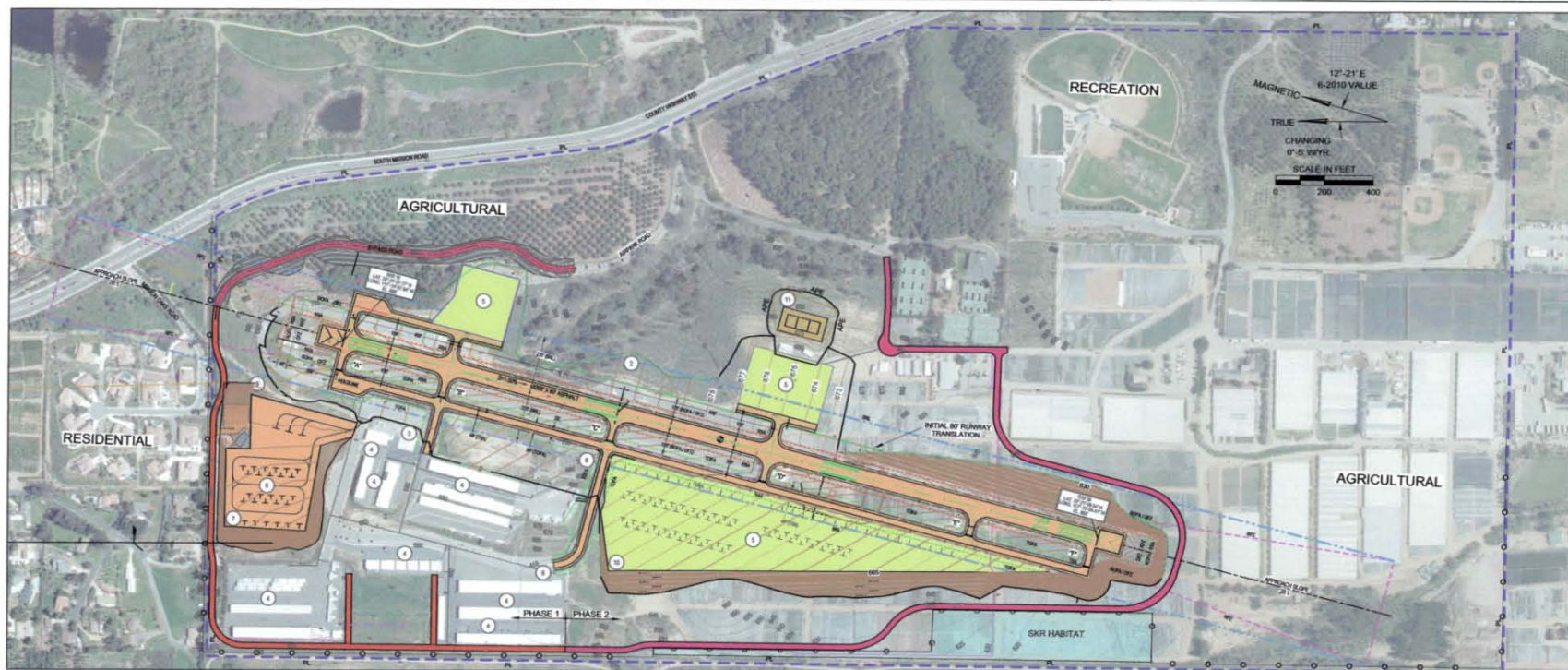
FALLBROOK COMMUNITY AIRPARK
TITLE SHEET

10-06-10
SCALE: HOR. AS SHOWN, VERT. AS SHOWN
W.A. R.S.
FILE NO.
SHEET 0 OF 4 SHEETS

10-06-10
SCALE: HOR. AS SHOWN, VERT. AS SHOWN
W.A. R.S.
FILE NO.
SHEET 0 OF 4 SHEETS



TITLE SHEET

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**DEPARTMENT OF PUBLIC WORKS**  
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 \_\_\_\_\_  
 APPROVED BY: \_\_\_\_\_  
 \_\_\_\_\_  
 MOHAMMAD FAKHREDDINE, COUNTY ENGINEER

	REVISIONS	BY	APPROVED	DATE
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COORDINATE INDEX	
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FALLBROOK COMMUNITY AIRPARK

NEW AIRPORT LAYOUT PLAN

10-06-10 / OF 4

SCALE: HOR. AS SHOWN VERT. AS SHOWN

W.A. \_\_\_\_\_ R.S. \_\_\_\_\_

FILE NO. \_\_\_\_\_

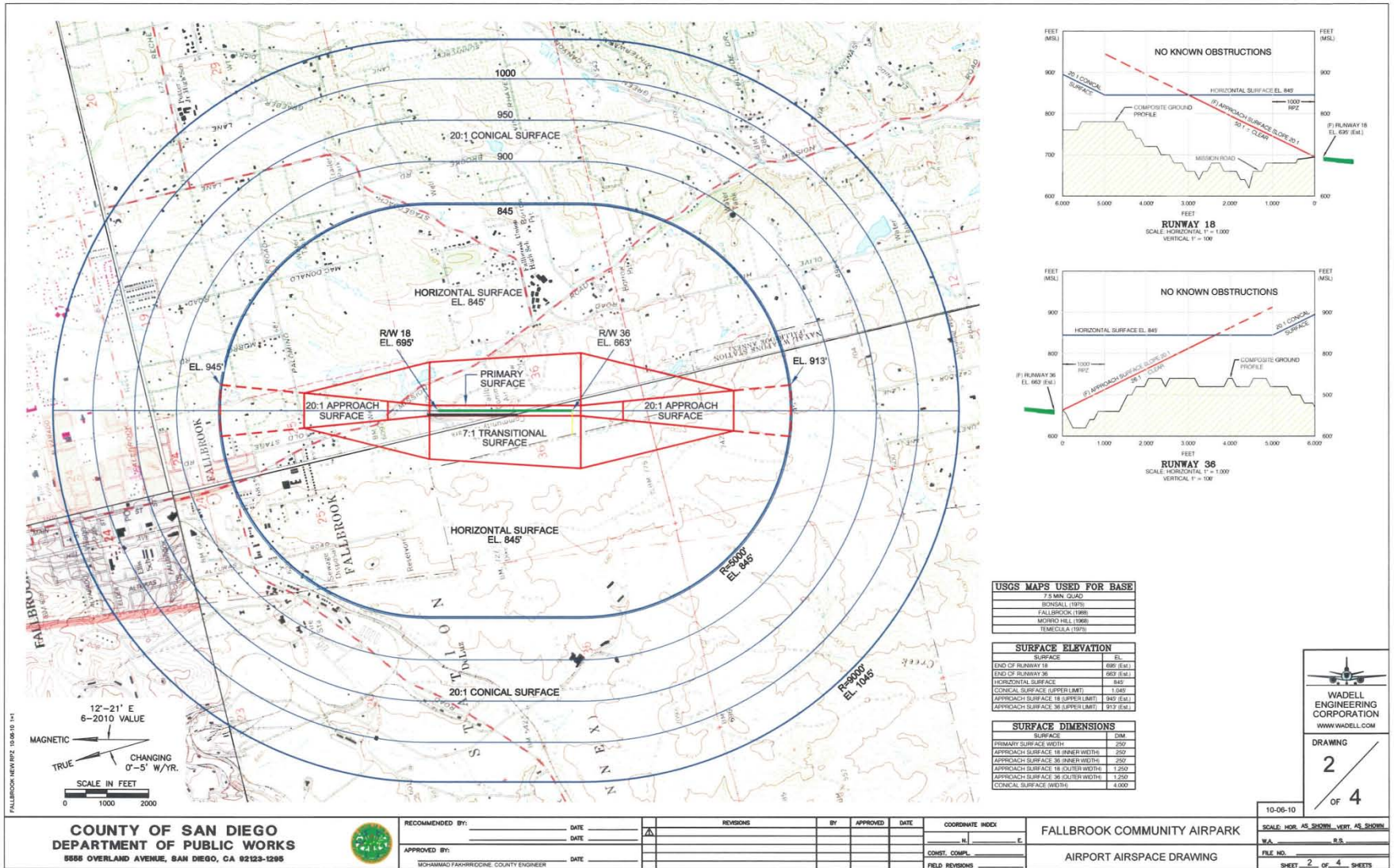
SHEET 1 OF 4 SHEETS

**WADELL  
ENGINEERING  
CORPORATION**  
[WWW.WADELL.COM](http://WWW.WADELL.COM)

DRAWING  
1  
OF 4

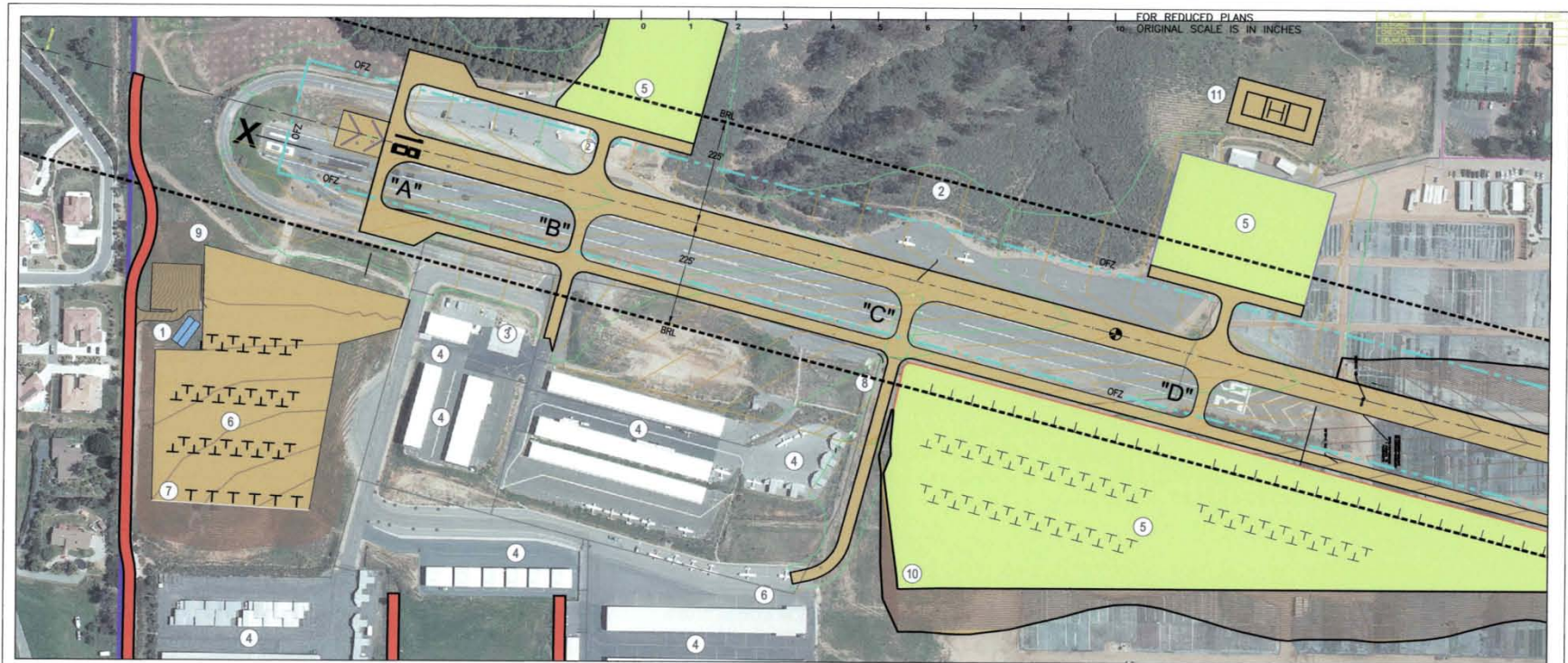
# NEW AIRPORT LAYOUT PLAN





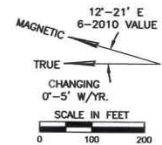
# AIRPORT AIRSPACE DRAWING





**BUILDING TABLE**

#	DESCRIPTION	HEIGHT (AGL)
1	AIRPORT ADMINISTRATION / TERMINAL	15' (E)
2	SEGMENTED CIRCLEWIND SOCK / WIND TEE	22' (E)
3	FUEL	15' (E)
4	HANGARS	16' - 18' (E)
5	TIE-DOWNS	NA
6	TRANSIENT TIE-DOWNS	NA
7	WASH RACK	NA
8	ELECTRIC VAULT	10' (E)
9	AIRPORT MAINTENANCE	16' (E)
10	COMPASS CALIBRATION PAD	NA
11	HELICOPTER FACILITIES	NA



DRAWING  
3  
OF 4

10-06-10

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**DEPARTMENT OF PUBLIC WORKS**  
5505 OVERLAND AVENUE, SAN DIEGO, CA 92123-1205



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APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
MOHAMMAD FARHEDDINE, COUNTY ENGINEER

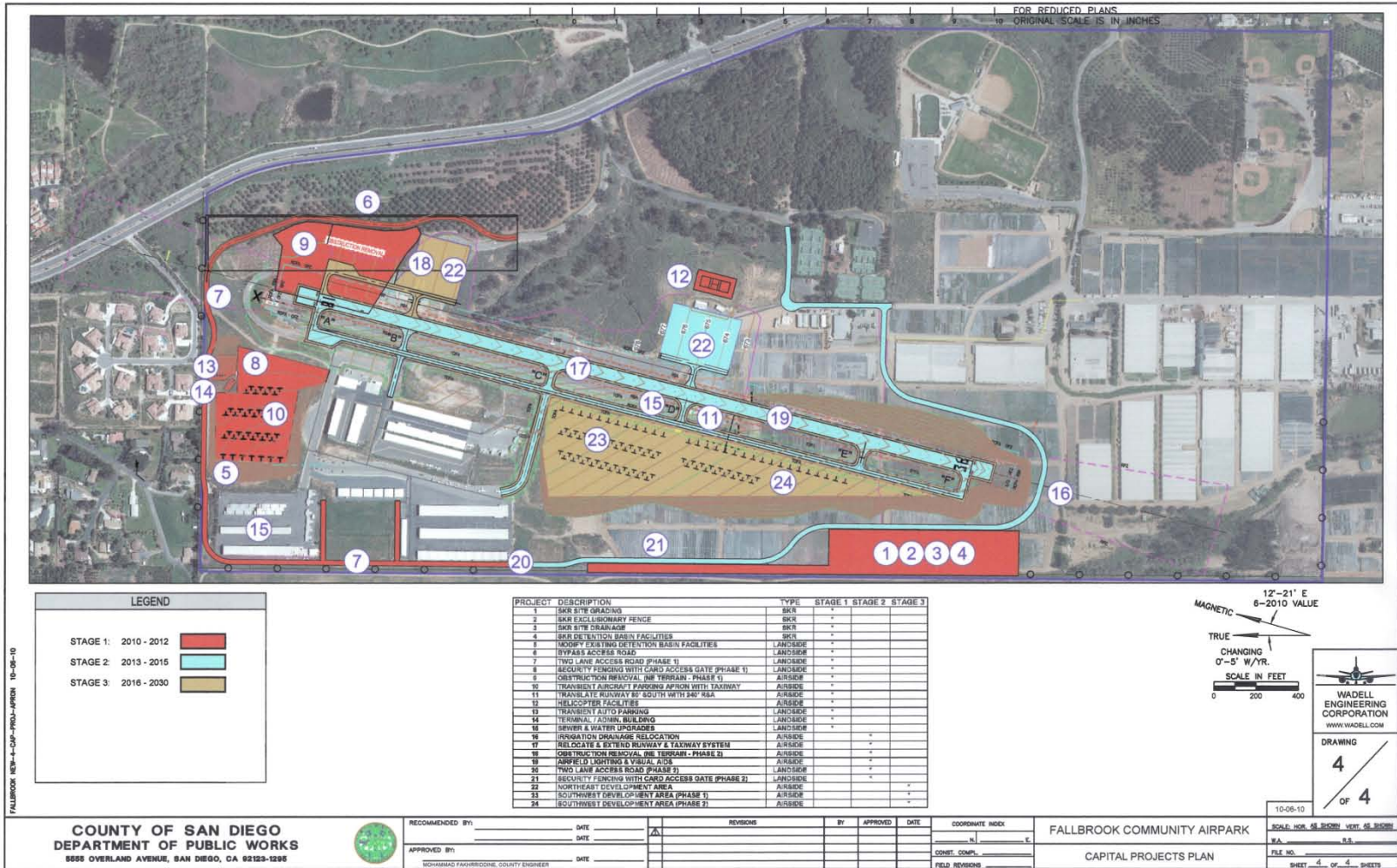
REVISIONS	BY	APPROVED	DATE

COORDINATE BOOK  
N. \_\_\_\_\_ E. \_\_\_\_\_  
CONST. COMPL. \_\_\_\_\_  
FIELD REVISIONS \_\_\_\_\_

**FALLBROOK COMMUNITY AIRPARK**  
**TERMINAL AREA LAYOUT PLAN**

SCALE: HORIZ. AS SHOWN, VERT. AS SHOWN  
W.A. \_\_\_\_\_ R.S. \_\_\_\_\_  
FILE NO. \_\_\_\_\_  
SHEET 3 OF 4 SHEETS

# TERMINAL AREA LAYOUT PLAN



# CAPITAL PROJECTS PLAN



PROJECT	DESCRIPTION	TYPE	STAGE 1	STAGE 2	STAGE 3
1	SKR SITE GRADING	SKR	*		
2	SKR EXCLUSIONARY FENCE	SKR	*		
3	SKR SITE DRAINAGE	SKR	*		
4	SKR DETENTION BASIN FACILITIES	SKR	*		
5	MODIFY EXISTING DETENTION BASIN FACILITIES	LANDSIDE	*		
6	BYPASS ACCESS ROAD	LANDSIDE	*		
7	TWO LANE ACCESS ROAD (PHASE 1)	LANDSIDE	*		
8	SECURITY FENCING WITH CARD ACCESS GATE (PHASE 1)	LANDSIDE	*		
9	OBSTRUCTION REMOVAL (NE TERRAIN - PHASE 1)	AIRSIDE	*		
10	TRANSIENT AIRCRAFT PARKING APRON WITH TAXIWAY	AIRSIDE	*		
11	TRANSLATE RUNWAY 80' SOUTH WITH 240' RSA	AIRSIDE	*		
12	HELICOPTER FACILITIES	AIRSIDE	*		
13	TRANSIENT AUTO PARKING	LANDSIDE	*		
14	TERMINAL / ADMIN. BUILDING	LANDSIDE	*		
15	SEWER & WATER UPGRADES	LANDSIDE	*		
16	IRRIGATION DRAINAGE RELOCATION	AIRSIDE		*	
17	RELOCATE & EXTEND RUNWAY & TAXIWAY SYSTEM	AIRSIDE		*	
18	OBSTRUCTION REMOVAL (NE TERRAIN - PHASE 2)	AIRSIDE		*	
19	AIRFIELD LIGHTING & VISUAL AIDS	AIRSIDE		*	
20	TWO LANE ACCESS ROAD (PHASE 2)	LANDSIDE		*	
21	SECURITY FENCING WITH CARD ACCESS GATE (PHASE 2)	LANDSIDE		*	
22	NORTHEAST DEVELOPMENT AREA	AIRSIDE			*
23	SOUTHWEST DEVELOPMENT AREA (PHASE 1)	AIRSIDE			*
24	SOUTHWEST DEVELOPMENT AREA (PHASE 2)	AIRSIDE			*

## LIST OF CAPITAL PROJECTS





LEGEND	
STAGE 1: 2010 - 2012	<span style="display: inline-block; width: 20px; height: 10px; background-color: red; border: 1px solid black;"></span>
STAGE 2: 2013 - 2015	<span style="display: inline-block; width: 20px; height: 10px; background-color: cyan; border: 1px solid black;"></span>
STAGE 3: 2016 - 2030	<span style="display: inline-block; width: 20px; height: 10px; background-color: tan; border: 1px solid black;"></span>

PROJECT	DESCRIPTION	TYPE	STAGE 1	STAGE 2	STAGE 3
1	SKR SITE GRADING	SKR	*		
2	SKR EXCLUSIONARY FENCE	SKR	*		
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6	BYPASS ACCESS ROAD	LANDSIDE	*		
7	TWO LANE ACCESS ROAD (PHASE 1)	LANDSIDE	*		
8	SECURITY FENCING WITH CARD ACCESS GATE (PHASE 1)	LANDSIDE	*		
9	OBSTRUCTION REMOVAL (NE TERRAIN - PHASE 1)	AIRSIDE	*		
10	TRANSIENT AIRCRAFT PARKING APRON WITH TAXIWAY	AIRSIDE	*		
11	TRANSLATE RUNWAY 80' SOUTH WITH 240' RSA	AIRSIDE	*		
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13	TRANSIENT AUTO PARKING	LANDSIDE	*		
14	TERMINAL / ADMIN. BUILDING	LANDSIDE	*		
15	SEWER & WATER UPGRADES	LANDSIDE	*		
16	IRRIGATION DRAINAGE RELOCATION	AIRSIDE		*	
17	RELOCATE & EXTEND RUNWAY & TAXIWAY SYSTEM	AIRSIDE		*	
18	OBSTRUCTION REMOVAL (NE TERRAIN - PHASE 2)	AIRSIDE		*	
19	AIRFIELD LIGHTING & VISUAL AIDS	AIRSIDE		*	
20	TWO LANE ACCESS ROAD (PHASE 2)	LANDSIDE		*	
21	SECURITY FENCING WITH CARD ACCESS GATE (PHASE 2)	LANDSIDE		*	
22	NORTHEAST DEVELOPMENT AREA	AIRSIDE			*
23	SOUTHWEST DEVELOPMENT AREA (PHASE 1)	AIRSIDE			*
24	SOUTHWEST DEVELOPMENT AREA (PHASE 2)	AIRSIDE			*

## CAPITAL PROJECTS PHASING

FOR REDUCED PLANS  
ORIGINAL SCALE IS IN INCHES

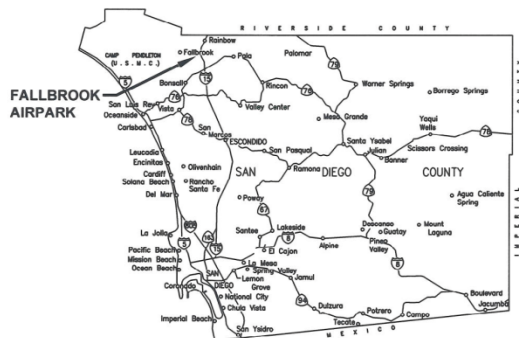
PLANS	BY	DATE
DESIGNED		
CHECKED		
DEVELOPED		

# PLANS FOR CONSTRUCTION OF RUNWAY 18-36 SAFETY AREA IMPROVEMENTS FALLBROOK COMMUNITY AIRPARK

WITH FUNDING FROM THE  
FEDERAL AVIATION ADMINISTRATION

OCTOBER 2010

FAA AIP PROJECT NO. 3-06-0078-04 &amp; 05



## AREA MAP



## STATE MAP

AIP # 206-0078-04805



10-14-10

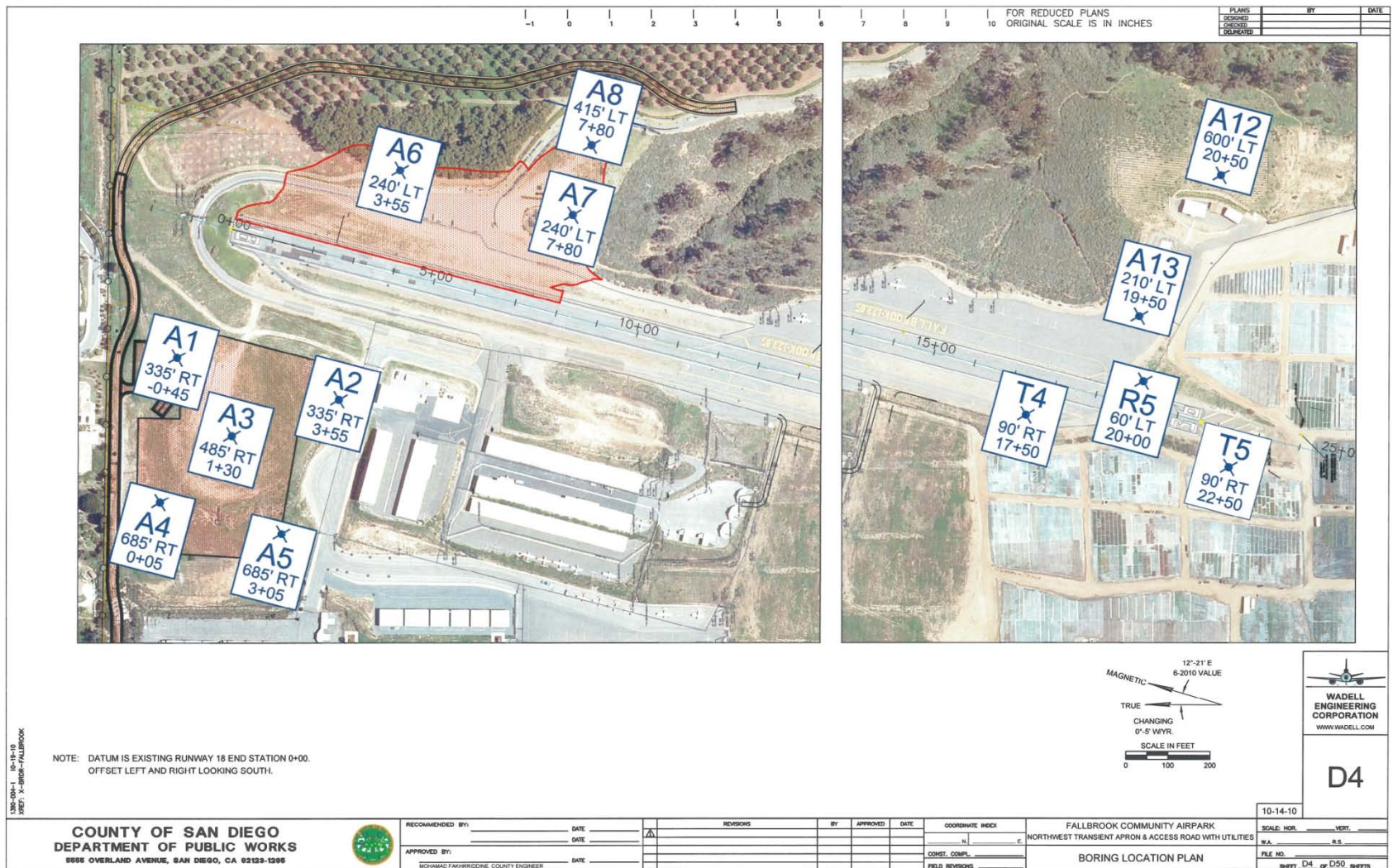
**COUNTY OF SAN DIEGO**  
**DEPARTMENT OF PUBLIC WORKS**  
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



RECOMMENDED BY: _____ DATE _____		REVISIONS	BY	APPROVED	DATE	COORDINATE INDEX	FALLBROOK COMMUNITY AIRPARK	SCALE: HORIZ. _____ VERT. _____
APPROVED BY: _____ DATE _____						N _____ E _____	NORTHWEST TRANSIENT APRON & ACCESS ROAD WITH UTILITIES	SHEET NO. _____ OF _____
WOMAHAM FALLBROOK, COUNTY ENGINEER						CONST. COMM. _____	TITLE SHEET	FILE NO. _____
						DESG. REVISIONS _____		Sheet: TS or _____

# TITLE SHEET

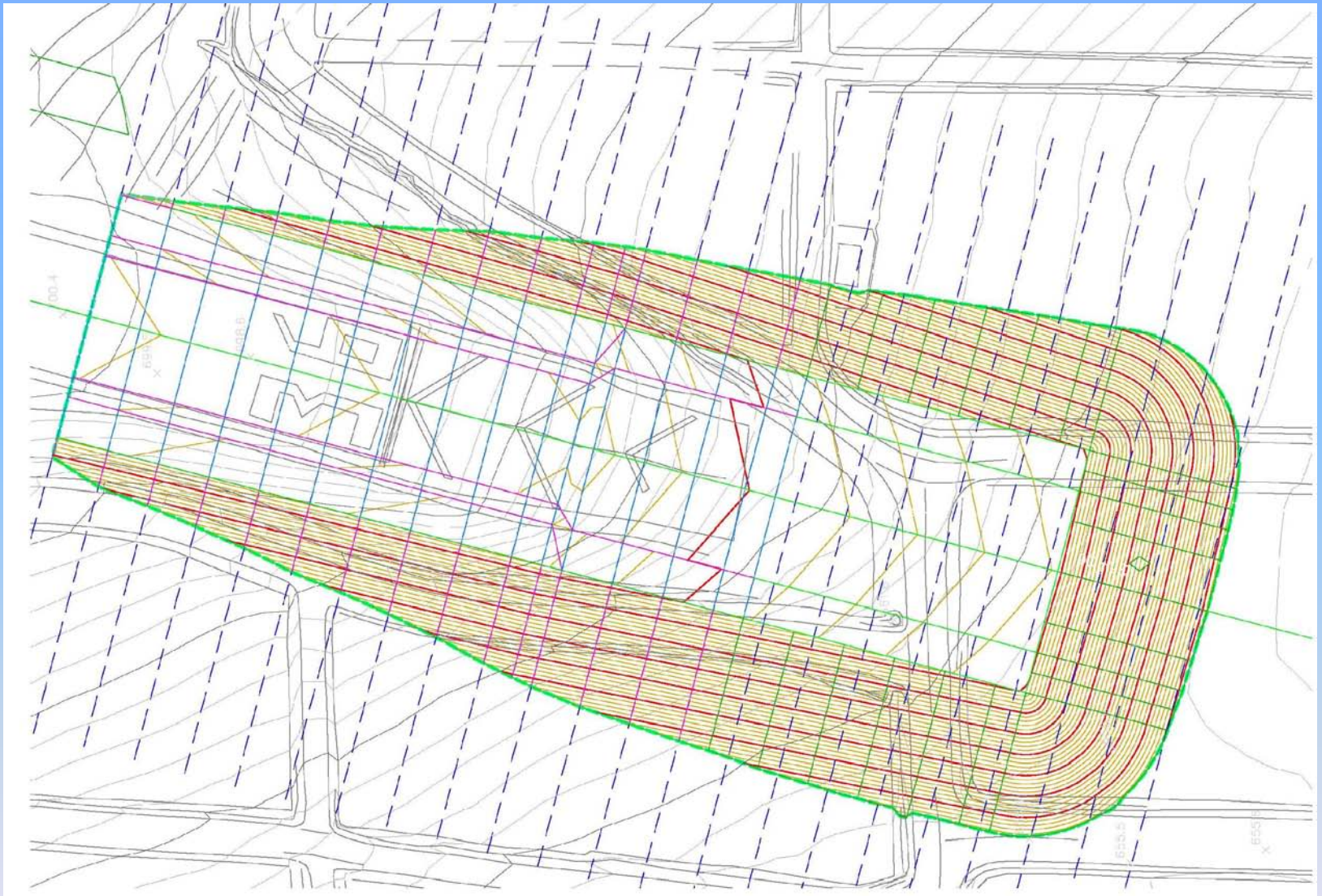




# BORING LOCATION PLAN







**SOUTH END RUNWAY TRANSLATION GRADING PLAN**





**HELICOPTER FACILITIES GRADING PLAN**



**FALLBROOK APRON, ROAD, TERRAIN, EXTENSION & HELIPAD****Apron**

CUT	4917	
FILL		27505
FILL FACTOR		1.15
CUT REQUIRED FOR FILL		31631

**Bypass Road**

CUT	15460	
FILL		6285
FILL FACTOR		1.15
CUT REQUIRED FOR FILL		7,228

**Obstructing Terrain**

CUT	110654	
FILL		2
FILL FACTOR		1.15
CUT REQUIRED FOR FILL		2

**Runway Extension**

CUT	147	
FILL		53,725
FILL FACTOR		1.15
CUT REQUIRED FOR FILL		61,784

**New Helipad**

CUT	0	
FILL		13,614
FILL FACTOR		1.15
CUT REQUIRED FOR FILL		15,656

**Project Summary**

CUT	131178	
CUT REQUIRED FOR FILL		116,301

EXCESS CUT                   **-14,877**

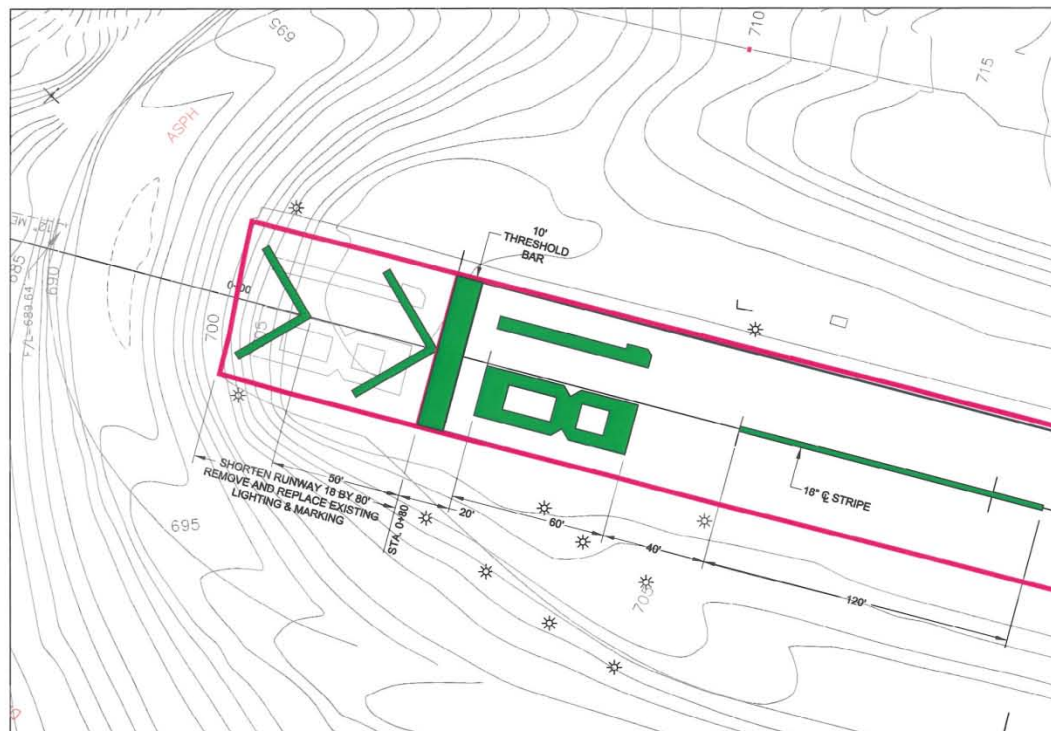




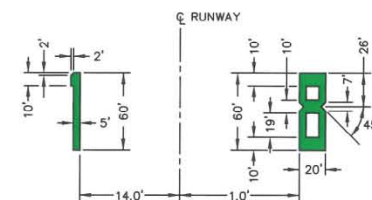


FOR REDUCED PLANS  
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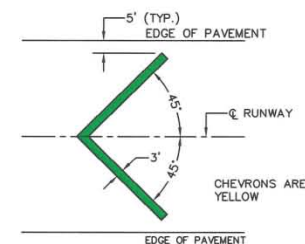
PLANS	BY	DATE
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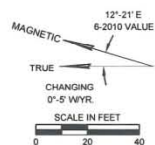
**RUNWAY 18 - MARKING PLAN AND DETAILS**



**RUNWAY NUMERALS**  
N.T.S.



**TYPICAL CHEVRON DETAIL**  
N.T.S.



**LEGEND:**

- NEW MARKING (2380 SF)
- EXISTING PAVEMENT

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APPROVED BY:	DATE:				
MOHAMMAD FAKHREDDINE, COUNTY ENGINEER					

COORDINATE INDEX	FALLBROOK COMMUNITY AIRPARK
N. E.	NORTHWEST TRANSIENT APRON & ACCESS ROAD WITH UTILITIES
CONST. COMPL.	MARKING PLAN & DETAILS - RUNWAY 18
FIELD REVISIONS	

SCALE: HOR. VERT.	10-14-10
W.A. R.S.	
FILE NO.	
SHEET D38 OF D50 SHEETS	

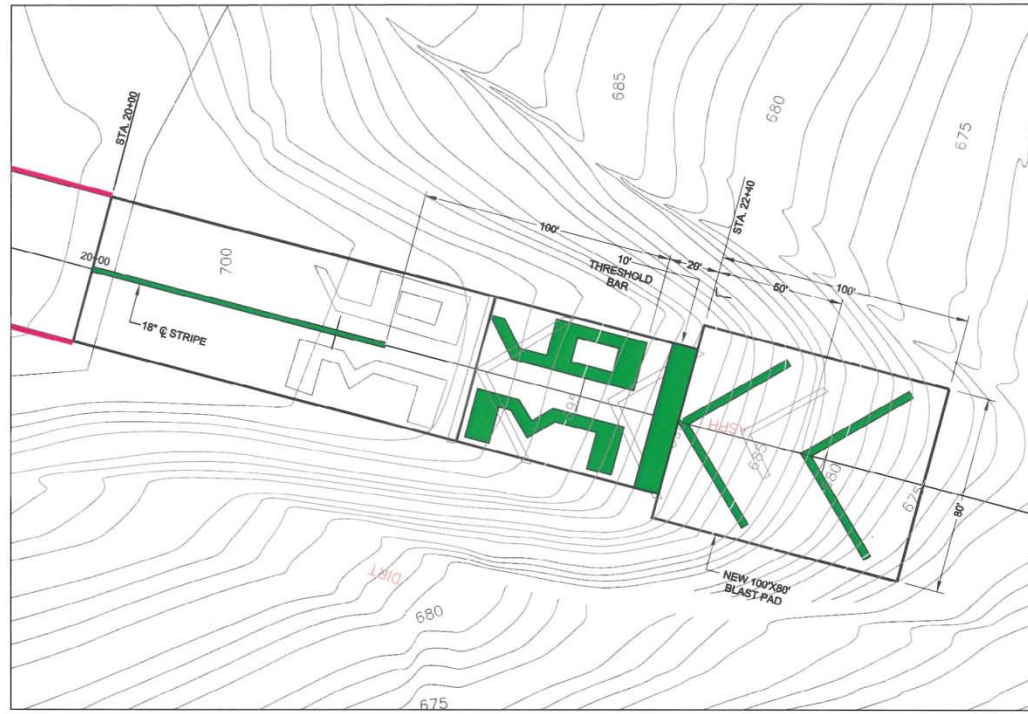


**D38**

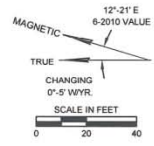
# **RUNWAY 18 MARKING PLAN**

FOR REDUCED PLANS  
ORIGINAL SCALE IS IN INCHES

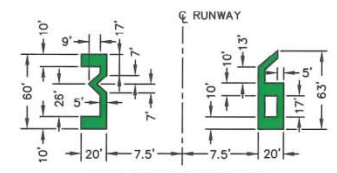
PLANS	BY	DATE
DESIGNED		
CHECKED		
DATE		



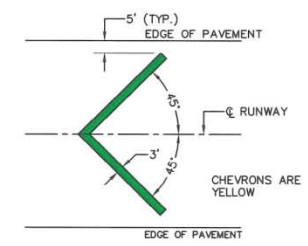
**RUNWAY 36 - MARKING PLAN**



- LEGEND:**
- NEW MARKING (2700 SF)
  - EXISTING PAVEMENT



**RUNWAY DESIGNATION DETAILS**  
N.T.S.



**TYPICAL CHEVRON DETAIL**  
N.T.S.

AIP # 3-06-0078-04&05



**D39**

10-14-10	SCALE: HOR. _____ VERT. _____
	FILE NO. _____
	SHEET <b>D39</b> OF D50 SHEETS

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APPROVED BY: _____	DATE: _____					
SCHWAB FARRINGTON, COUNTY ENGINEER						

FALLBROOK COMMUNITY AIRPARK  
NORTHWEST TRANSIENT APRON & ACCESS ROAD WITH UTILITIES  
**MARKING PLAN & DETAILS - RUNWAY 36**

# **RUNWAY 36 MARKING PLAN**



# THE END

